

I. THE PRESENT INVENTION

The present invention is directed to an extensible and replaceable network-oriented component system that provides a platform for developing *network navigation components* that operate on a variety of hardware and software computer systems. Such a highly-modular cooperating layered-arrangement between the network component system and the component architecture allows a component to be easily replaced, and allows new components to be added. The present invention provides a network navigating service which employs a "component-based" approach to browsing and retrieving network-oriented information as opposed to the monolithic application-based approach of prior browsing systems.

To provide the extensible and replaceable network component system of the present invention, the system includes a network component layer 450 (see Fig. 4) that delivers services and facilitates development of navigation components directed to computer networks, such as the Internet. Specifically, the network component layer 450 extends the functionality of the underlying component architecture layer 430 by defining network-oriented components 480 (see Fig. 4). The network component layer 450 and the component architecture layer 430 cooperate to provide a user with the ability to extend or replace, any of the components of the layered computing arrangements 400 with a different component to provide the user with customized computer *network-related* services.

II. THE CITED ART

Arnold discloses that object oriented software technologies can be applied to telephone switching software architectures and the associated software development process. Specifically, Arnold discloses that the telephone switching system software architecture is based on plug-compatible software components.

III. DIFFERENCE BETWEEN THE PRESENT INVENTION AND THE CITED ART

Claim 1 of the present invention includes:

"a network component layer for developing network navigation components that provide services directed to the computer network, the

network component layer coupled to the software component architecture layer in integrating relation to facilitate communication among the computing and network navigation components".
(emphasis added).

In contrast, Arnold merely discloses the use of a component architecture in a telephone switching system. A fair and proper reading indicates Arnold provides no teaching or suggestion of computer networks, and clearly no teaching of network navigation components. Notably, Arnold neither discloses nor suggests "*a network component layer for developing network navigation components that provide services directed to the computer network*" (cl. 1). A 35 U.S.C. §102 rejection requires that a single reference teach each and every element of the claimed invention. Hence, Arnold is incapable of anticipating claim 1.

5-8. Claims 2-5 and 7 currently stand rejected under 35 U.S.C. §103 as allegedly being unpatentable in view of Arnold and further in view of the printed publication entitled "Cyberdog Could be a Breakthrough if it's kept on a Lease" by Henry Norr, published in Macweek, Vol. 8, Number 45, pg. 50, November 14, 1994 (hereinafter "Norr").

Norr briefly reports on a rumored product development by Apple Computer referred to as "Cyberdog" which is a suite of OpenDoc components with networking and communications capabilities, including an integrated set of Internet browsing tools. As reported by Norr, the object of Cyberdog is to enable a user to locate information anywhere on the global network, and embed extracts, together with hypertext links to sources of additional detail or background, directly into reports and presentations.

With respect to claim 2, it is alleged that Arnold discloses the claimed invention with the exception of a computing arrangement wherein the network navigation components are objects and the network component layer comprises application programming interfaces delivered in the form of objects in a class hierarchy. However, the combination of Arnold and Norr fails to provide a proper teaching of several other claim elements. Specifically, as set forth above, Arnold does not provide a teaching of the network component layer. In fact, Arnold provides no teaching regarding computer networks or providing network navigation services to computer networks.

It is also alleged that Norr discloses a network component layer (see Official Action, pg. 5, last paragraph). However, a fair and proper reading of Norr fails to reveal any suggestion of a network component layer as claimed. The Official Action is noticeably silent with respect to specifically where the teaching of the network interface layer appears in Norr.

In addition, neither Arnold nor Norr provides a suggestion that would lead a skilled person to combine these references. Arnold simply discloses that object oriented software technologies can be applied to a *telephone switching system*, and specifically to the software development process associated with the telephone switching system. Norr briefly reports on the rumored development of an Apple Computer product referred to as "Cyberdog", which is described as a suite of OpenDoc components with networking and communications capabilities, including an integrated set of Internet browsing tools. Assuming that Norr is a prior art reference, a skilled person working in the field of Internet browsing tools would not look to the field of telephone switching systems (i.e., Arnold). In fact, if one was to modify Arnold as suggested to create the present invention, Arnold would no longer operate for its intended function as a telephone switch. It is well known that references are not properly combinable or modifiable if their intended function is destroyed. Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.'" In re Laskowski, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), citing In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). It is respectfully submitted that the combined teachings of Arnold and Norr fails to provide a proper suggestion that would lead a skilled person to arrive at the claimed invention.

Furthermore, it is evident that Norr is not prior art since Norr admits that he is merely reporting on rumored work at Apple Computer by stating "[i]f I understand the secret project correctly . . ." (pg. 1 of the reproduced article, emphasis added). One's own work, whatever the form of the disclosure, may not be prior art against one-self, absent a statutory bar.

Claims 3-5 and 7 are also patentable for all the same reasons as set forth above.

9. Claim 6 currently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over Arnold, in view of Norr and further in view of the printed publication entitled "Object Component Suites: The Whole is Greater than the Parts", Datamation, February 15, 1995; Vol. 41, Number 3, pg. 44 by Harkey et al. (hereinafter "Harkey").

Harkey discloses that distributed objects need to be packaged as components in order to properly build to order entire information systems by assembling off-the-shelf object components. Notably, Harkey discloses that an OpenDoc document will act as a central integration point for multiple sources of data that reside on different servers. For example, it is disclosed that end users will be able to create custom applications by choosing a container and populating it with active parts that live on servers anywhere on the network. It is imagined that the user will be able to access multiple data sources and business objects through multiple client/server connections from within a single visual container or document.

Claim 6 is patentable for all the reasons set forth above. Notably, Arnold provides no teaching of a computer network or tools for browsing the Internet. Hence, there is no proper suggestion in either Arnold, Norr or Harkey that would lead a skilled person to combine the teachings of these references as suggested in the Official Action.

For all the foregoing reasons, reconsideration and allowance of claims 1-20 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

The Commissioner is hereby authorized to charge any other fees under 37 C.F.R.
§1.16 and 1.17 that may be required, or credit any overpayment, to our Deposit Account No.
03-1237.

Respectfully submitted,



Patrick J. O'Shea
Reg. No. 35,305
Cesari and McKenna, LLP
30 Rowes Wharf
Boston, MA 02110
(617) 951-2500